



U.S. Department
of Transportation

**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

November 14, 2007

Exemption No. 8716A
Regulatory Docket No. FAA-2002-11286

Mr. W.D. Hospers
CEO
Vintage Flying Museum
P.O. Box 820099
Fort Worth, TX 76182

Dear Mr. Hospers:

This letter is to inform you that we have granted your petition to extend Exemption No. 8716. It explains the basis for our decision, describes its effect, and lists the revised conditions and limitations.

The Basis for Our Decision

By letter dated October 10, 2007, you petitioned the Federal Aviation Administration (FAA) on behalf of Vintage Flying Museum (VFM) for an extension of Exemption No. 8716. That exemption from §§ 119.21(a), 119.5(g), and 91.315 of Title 14, Code of Federal Regulations (14 CFR) allows VFM to operate a B-17 and a B-25 while carrying passengers on local educational flights for compensation or hire, subject to the conditions and limits described below as appropriate to aircraft type and certification. In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to VFM.

Our Decision

The FAA has determined that the justification for the issuance of Exemption No. 8716 remains valid with respect to this exemption and is in the public interest. Therefore, under the

AFS-08-053-E

authority provided by 49 U.S.C. 40113 and 44701, which the FAA Administrator has delegated to me, I grant your petition, subject to the revised conditions and limitations.

Conditions and Limitations

1. This exemption applies only to the aircraft listed below—
 - a. B-17, registration No. N3701G and serial No. 44-8543A; and
 - b. B-25, registration No. N1042B and serial No. 44-30823A.

2. VFM must maintain the B-17 and B-25 in accordance with the—
 - a. Maintenance requirements as specified in the B-17 and B-25 type specification sheet, as amended;
 - b. FAA-approved maintenance inspection program that meets the requirements of § 91.409(e), (f)(4) and (g); and
 - c. B-17 and B-25 military technical manuals.

3. The pilot in command (PIC) for the B-17 and B-25 must—
 - a. Hold at least a commercial pilot certificate with an airplane multiengine land rating, an airplane instrument rating, and a B-17 or B-25 type rating;
 - b. Have completed, within the previous 12 calendar months, VFM's PIC qualification and recurrent flight and ground training program in the B-17 and B-25 for which PIC privileges are sought;
 - c. Have completed, within the previous 12 calendar months, VFM's PIC proficiency check in the B-17 and B-25 for which PIC privileges are sought;
 - d. Have at least a total of 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine land airplanes, and 25 hours in a B-17 or B-25; or have at least a total of 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in a multiengine land airplane, and 100 hours and 50 takeoffs and 50 landings in a B-17 or B-25; and
 - e. Have accomplished, within the previous 90 days, three takeoffs and three landings to a full stop in a B-17 or B-25 for which PIC privileges are sought. For initial PIC qualification in a B-17 or B-25 or if the pilot has allowed his/her takeoff and landing currency to lapse in a B-17 or B-25 the takeoff and landing currency may not be accomplished during passenger-carrying operations.

4. The second in command (SIC) for the B-17 or B-25 must —
 - a. Hold at least a commercial pilot certificate with an airplane multiengine land rating and an airplane instrument rating;

- b. Have completed, within the previous 12 calendar months, VFM's SIC qualification and recurrent flight and ground training program in a B-17 or B-25 for which SIC privileges are sought;
 - c. Have completed, within the previous 12 calendar months, VFM's SIC proficiency check in a B-17 or B-25 for which SIC privileges are sought;
 - d. Have at least a total of 1,500 hours of aeronautical flight experience, 250 hours of aeronautical flight experience in a multiengine land airplane; or have at least a total of 500 hours of aeronautical flight experience, 100 hours of aeronautical flight experience in a multiengine land airplane, and 25 hours and 10 takeoffs and 10 landings in a B-17 or B-25; and
 - e. Have accomplished, within the previous 90 days, three takeoffs and three landings to a full stop in a B-17 or B-25 for which SIC privileges are sought. For initial SIC qualification in a B-17 or B-25 or if the pilot has allowed his/her takeoff and landing currency to lapse in a B-17 or B-25, the takeoff and landing currency may not be accomplished during passenger-carrying operations.
5. VFM must develop and maintain a written B-17 and B-25 qualification and recurrent ground training program for its PICs and SICs in the B-17 and B-25 that covers the training subjects listed below. Each PIC and SIC in the B-17 or B-25 must receive the following training within the previous 12 calendar months and be found to be competent and proficient in these areas prior to serving in a PIC or SIC position in the B-17 or B-25:

REQUIRED TRAINING TASKS	
a.	General information and description of the airplane;
b.	Aircraft limitations;
c.	Aircraft servicing;
d.	Airspeeds;
e.	Fuel system;
f.	Electrical system;
g.	Hydraulic system;
h.	Engines;
i.	Instruments and avionics;
j.	Landing gear, brakes, controls, and flaps systems;
k.	Propeller;
l.	Emergency procedures, including—
(i)	Instruction in emergency assignments and procedures, including coordination among crewmembers;
(ii)	Individual instruction in the location, function, and operation of emergency equipment, including—
A.	First aid equipment and its proper use; and
B.	Portable fire extinguishers, with emphasis on the type of extinguisher to

be used on different classes of fires;
(iii) Instruction in the handling of emergency situations, including—
A. Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas; and
B. Illness, injury, or other abnormal situations involving passengers or crewmembers;
m. Weight and balance;
n. Performance planning; and
o. Airplane's checklist.
p. Differences in type

6. VFM must develop and maintain a written B-17 and B-25 qualification and recurrent flight training program for its PICs in the B-17 or B-25 that covers the areas of operations and tasks, as listed in the following table of training tasks. Each PIC in the B-17 or B-25 must successfully accomplish this training before being assigned PIC responsibilities and duties. Each PIC in the B-17 or B-25 must receive and successfully accomplish the following training within the previous 12 calendar months and be found to be competent and proficient in these areas prior to serving in a PIC position in the B-17 or B-25 for VFM:

REQUIRED TRAINING TASKS
a. Preflight Preparation
(i) Aircraft exam (oral or written)
(ii) Aircraft performance & limitations (oral or written)
b. Ground Operations
(i) Preflight inspection
(ii) Cockpit resource management
(iii) Powerplant start procedures
(iv) Taxiing
(v) Pre-takeoff checks
c. Takeoffs & Departures
(i) Normal & crosswind takeoffs
(ii) Powerplant failure
(iii) Rejected takeoffs
d. In-flight Maneuvers
(i) Steep turns
(ii) Approach to stalls
(iii) Powerplant failure
(iv) Specific flight characteristics
e. Landings & Approaches to Landing
(i) Normal & crosswind approaches & landing
(ii) Maneuvering to a landing with a simulated powerplant failure

(iii) Rejected landing
(iv) Landing from a no flap or a nonstandard flap approach
f. Normal & Abnormal Procedures
(i) Powerplant
(ii) Fuel system
(iii) Electrical system
(iv) Hydraulic system
(v) Environmental & pressurization system (as appropriate and if equipped)
(vi) Fire detection & extinguishing system
(vii) Navigation & avionics system
(viii) Automatic flight control system, electronic flight instrument system, & related systems (as appropriate and if equipped)
(ix) Flight control system
(x) Anti-ice & de-ice system
(xi) Aircraft & personal emergency equipment
g. Emergency Procedures
(i) In-flight fire & smoke removal
(ii) Rapid decompression (as appropriate and if equipped with a pressurization system)
(iii) Emergency descent
(iv) Ditching
(v) Emergency evacuation
h. Postflight Procedures
(i) After landing procedures
(ii) Parking and securing aircraft

7. VFM must develop and maintain a written B-17 or B-25 qualification and recurrent flight training program for its SICs in the B-17 or B-25 that covers the areas of operations and tasks, as listed in the following table of training tasks. Each SIC in the B-17 or B-25 must successfully accomplish this training before being assigned SIC responsibilities and duties. Each SIC in the B-17 or B-25 must receive and successfully accomplish the following training within the previous 12 calendar months and be found to be competent and proficient in these areas prior to serving in an SIC position in the B-17 and B-25 for VFM:

REQUIRED TRAINING TASKS	
a.	Operational procedures applicable to the powerplant, equipment, and systems.

b. Performance specifications and limitations.
c. Normal, abnormal, and emergency operating procedures.
d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls.
e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC.
f. Crew resource management training.
g. Familiarization with the aircraft flight manual, placards, and markings.

8. VFM may not use a pilot nor may any pilot serve as a pilot in any aircraft unless, since the beginning of the 12th calendar month before that service, that pilot has passed a competency check given by the FAA or an authorized check pilot in that aircraft to determine the pilot's competence in practical skills and techniques in the appropriate aircraft. The competency check will consist of the appropriate maneuvers and procedures currently required for the original issuance of the commercial pilot certificate. The FAA's Fort Worth Flight Standards District Office (FSDO) will determine what maneuvers and procedures are critical, such as preflight preparation, ground operations, takeoffs and departures, and normal procedures, etc., and maneuvers and procedures that may be unsafe for a particular aircraft.
9. Recurrent flight training for pilots must include, at least, flight training in the maneuvers and procedures in this exemption. However, satisfactory completion of the check required by this exemption within the preceding 12 calendar months may be substituted for recurrent flight training.
10. VFM must document and record all ground and flight training and/or testing required by this grant of exemption in a manner acceptable to the FAA's Fort Worth FSDO. That documentation and records must contain the following information:
 - a. Date of each training session.
 - b. Date of each testing session.
 - c. The amount of time of each session of ground and flight training given.
 - d. The amount of time of each session of ground and flight testing given.
 - e. Location where each session of ground and flight training was given.
 - f. Location where each session of ground and flight testing was given.
 - g. The airplane identification number in which each flight training session was received.
 - h. The airplane identification number in which each flight testing session was received.

- i. The name and certificate number of the pilot who provided each session of training.
 - j. The name and certificate number of the pilot who provided each session of testing.
 - k. The signature and printed name of the pilot who received the training. That pilot's signature will serve as a verification of having received each session of training.
 - l. The signature and printed name of the pilot who received the testing. That pilot's signature will serve as a verification of having received each session of testing.
- 11. When requested, the VFM's pilot qualification and recurrent ground- and flight-training programs and/or records listed in condition Nos. 4, 5, 6, 7, 8, 9, and 10 must be made available to the Fort Worth FSDO, Alliance Airport, 2260 Alliance Blvd., Suite 400, Fort Worth, Texas 76177-4300; (817) 491-5000.
- 12. VFM must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.
- 13. VFM will maintain the following information and records and will make those records available for review to the FAA when requested:
 - a. The name of each pilot crewmember VFM authorizes to conduct flight operations in its airplanes under the terms of this exemption;
 - b. Copies of each PIC's and SIC's pilot certificate, medical certificate, qualifications, and initial and recurrent training and testing documentation to comply with condition Nos. 3, 4, 5, 6, 7, 8, 9, and 10; and
 - c. Records of maintenance performed and maintenance inspection records to comply with condition Nos. 2 and 12. Maintenance and inspection records must meet the requirements of §§ 91.405, 43.9, and 43.11.
- 14. Before permitting a person to be carried on board its airplane for the purposes authorized under this exemption, VFM will inform that person that its airplanes hold only a limited airworthiness certificate; the significance of the airworthiness certificate as compared to a standard airworthiness certificate; and that the FAA has authorized this flight under a grant of exemption from the requirements of §§ 91.315, 119.5(g), and 119.21(a). The explanation of the significance of a limited airworthiness certificate, experimental airworthiness certificate compared to a standard airworthiness certificate, must include at least the following information:
 - a. The FAA has not established nor has it approved limited category airworthiness certificated aircraft manufacturing standards. The FAA has not established nor has it approved experimental category airworthiness certificated aircraft

manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the design of the aircraft and life-limited parts.

- b. Limited category airworthiness certificated aircraft are issued when the FAA finds the airplane—
 - i. Has been previously issued a limited category type certificate and the aircraft conforms to that type certificate; and
 - ii. To be in a good state of preservation and repair and is in a safe operating condition.
 - c. An aircraft may be issued an experimental airworthiness certificate for the purpose of exhibition when the aircraft is intended only for exhibition of the aircraft's flight capabilities, performance, or unusual characteristics at airshows, motion picture, television, and similar productions and the maintenance of exhibition flight proficiency, including (for persons exhibiting the aircraft) flying to and from such airshows and productions.
 - d. Standard category airworthiness certificates are issued for an aircraft when the FAA finds the—
 - i. Aircraft has been built and maintained in accordance with that aircraft's type certification standards as established by the FAA; and
 - ii. Aircraft's inspection and maintenance requirements are in compliance with the applicable Federal Aviation Regulations.
15. VFM must notify the Fort Worth FSDO within 24 hours of any of the following occurrences by written report, by electronic mail, or by facsimile:
- a. Each in-flight fire in any system or area that requires activation of any fire suppression system or discharge of a portable fire extinguisher.
 - b. Each exhaust system component failure including the turbocharger components that causes damage to any engine, structure, cowling, or components.
 - c. Each airplane component or system that causes, during flight, accumulation or circulation of noxious fumes, smoke, or vapor in any portion of the cabin or crew area.
 - d. Except for training, each occurrence of engine shutdown or propeller feathering, and the reason for such shutdown or feathering.
 - e. Each failure of the propeller governing systems or feathering systems.
 - f. Any landing gear system or component failures or malfunctions, which require use of emergency or standby extension systems.
 - g. Each failure or malfunction of the wheel brake systems that cause loss of brake control on the ground.

- h. Each airplane structure that requires major repair due to damage, deformation, or corrosion, and the method of repair.
- i. Each failure or malfunction of the fuel system, tanks, pumps, or valves.
- j. Each malfunction, failure, or defect in any system or component that requires taking emergency action of any type during the course of any flight.
- k. For the purpose of this section, "during flight" means the period from the moment the airplane leaves the surface of the earth on takeoff until it touches down on landing.

16. All flight operations must be conducted —

- a. At a minimum operating altitude of not less than 1,000 feet above ground level (AGL);
- b. Between the hours of official sunrise and sunset, as established in the American Air Almanac, as converted to local time;
- c. Within a 25-statute-mile radius of the departure airport with landings only permitted at the departure airport;
- d. With a minimum flight visibility of not less than 3 statute miles and a minimum ceiling of not less than 1,500 feet AGL;
- e. Passenger-carrying operations for compensation may be conducted at distances greater than 25 statute miles of the departure airport up to 50 statute miles with concurrence of the FAA FSDO having geographic responsibility for the aviation event. For such flights, landings are only permitted at the departure airport. The operator must provide information pertaining to the proposed route of flight, which will avoid densely populated areas or congested airways in accordance with 14 CFR § 91.319(c) for aircraft certificated in the experimental category. Those operators utilizing aircraft certificated in the limited category are not bound by the restriction regarding the avoidance of densely populated areas or congested airways;
- f. For passenger-carrying flights greater than 25 statute miles from the departure airport and up to 50 statute miles, the PIC must obtain weather reports and forecasts prior to flight and valid for the duration of the proposed operation that indicate that the weather would be no less than 5 statute miles visibility and cloud ceilings no less than 2,000 feet AGL. Passenger-carrying operations shall be terminated if ceiling and visibility become less than the minimum required by these conditions and limitations. Weather forecasts listing discriminators such as probability (PROB), becoming (BECOMG), or temporarily (TEMPO) shall be limiting; and
- g. The aircraft may only be operated from an airport that has a fire station or fire-fighting services available or within close proximity of the airport.

17. No persons other than the assigned flight crewmembers may be permitted on the pilot station of the airplane during flight operations.
18. Except for essential crewmembers, all flight operations must carry no more than the maximum number of passengers permitted by the aircraft's weight and balance limitations and number of approved seats in the airplane.
19. All aircraft must have the equipment listed in §§ 91.205(b) and 91.207 and that equipment must be in an operable condition during the flight.
20. VFM must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a § 501(c)(3) nonprofit, tax-exempt, charitable organization under §§ 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.
21. VFM must notify the Fort Worth FSDO at least 5 working days (Mondays through Fridays) before conducting any PIC or SIC initial or recurrent qualification training and any PIC or SIC initial or recurrent proficiency checks required to be conducted under the terms of this grant of exemption.
22. No later than 72 hours prior to commencing flight operations under the terms of this grant of exemption, VFM must notify the jurisdictional FAA FSDO where it intends to conduct the flight operations and shall provide a copy of this exemption to that jurisdictional FAA FSDO.
23. Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or revocation of this exemption.

The Effect of Our Decision

Our decision extends the termination date of Exemption No. 8716 to November 30, 2009, unless sooner superseded or rescinded. This letter must be attached to, and is a part of, Exemption No. 8716.

Sincerely,

/s/

James J. Ballough

Director, Flight Standards Service